

AIR FORCE MATERIEL COMMAND
**LEADING
EDGE**

July 2002

AFMC —
Celebrating 10 years
of warfighter support



A decade ago, two proud organizations
integrated as Air Force Materiel Command
to meet the needs of tomorrow's Air Force





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1996

Second Place, 1998, 1997, 1995

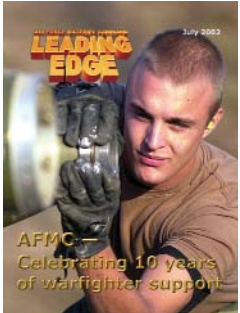
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Cover Stories



Cover photo of Airman 1st Class Joe D'Antonio double checks fittings on a GBU-24 bomb. (U.S. Air Force photo) Cover design by Ms. Libby VanHook, AFMC/PAI.

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On July 1, 1992, two proud organizations integrated to form the Air Force Materiel Command and meet the challenges of a changing Air Force. As we celebrate AFMC's 10th anniversary, we look back on its roots and forward to the future...

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"The Cat in The Hat" recently celebrated its birthday at Brooks AFB, Texas. Read all about it on page 26.

Correction: In the May 2002 Almanac edition on page 43 the photo caption should read "two F-5 Republic of Singapore Air Force Aircraft."



Edwards continues to test F-15 targeting pods

EDWARDS AIR FORCE BASE, Calif. — Test pilot Lt. Col. Troy Fontaine and Maj. Kevin Steffenson, a weapons system officer, dropped five MK-84 Joint Direct Attack Munitions from their F-15 Eagle over the Navy's China Lake test range near Edwards recently. The mission, which proved successful, was to ripple the five, 2000-pound weapons on five separate, pre-planned targets using global positioning system coordinates.

— Information provided by AFFTC Public Affairs

F-22 program successfully completes static tests

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The F-22 program successfully completed all planned static tests on the F-22 airframe recently. The program is managed by the F-22 System Program Office at Aeronautical Systems Center.

Static tests of the F-22 airframe began in March 1999 and incorporated 120 test conditions.

The air vehicle level tests were the first phase of the test program and were designed to test the strength of the primary aircraft components with the forces and pressures it could experience in actual flight.

Static testing of the F-22 was conducted at Lockheed Martin Aeronautical Company's facilities in Marietta, Ga.

Lockheed Martin, the Boeing Company, Seattle, Wash., and Pratt & Whitney, Hartford, Conn. have joined the Air Force to develop and produce the revolutionary F-22, which is slated to be operational in late 2005.

— Information provided by ASC Public Affairs

AEDC tests technology demonstrator engine

ARNOLD AIR FORCE BASE, Tenn. — Testing of a new Pratt & Whitney Advanced Experimental Turbine Engine Gas Generator is underway in the Propulsion Development Test Cell J-1 at Arnold Engineering Development Center.

The Pratt and Whitney XTC67-1, an experimental turbine engine gas generator, successfully completed initial operational checkouts, including starting and operating at idle conditions and preparations continue to expand operations to full power conditions.

The engine was built to demonstrate the latest technologies and goals derived from the integrated high-performance turbine engine technology program.

To meet the latest technology demonstration requirements, AEDC employees completed special upgrades to the high-pressure in-bleed and out-bleed systems. The in-bleed system provides regulated high-pressure and high-temperature air used for compressor stall line definition testing. AEDC's Von Karmon Gas Dynamics Facility generates the high-pressure air, and the upgraded T3 heater heats it.

Other system work includes reactivation of a high-flow and high-pressure water pump, expanded instrumentation systems to measure high-pressures, a new throttle system and an improved strain gage conditioning system.

— Information provided by AEDC Public Affairs

X-45A UCAV completes first flight over Edwards

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The X-45A Unmanned Combat Air Vehicle took to the skies May 22 over Edwards AFB, Calif., for its first flight. The 14-minute flight marked the first step in transforming Air Force combat capability of the early 21st century.

This major advance in aerospace technology occurred as the result of a Defense Advanced Research Projects Agency, Air Force and Boeing collaboration.

The X-45A took off from NASA's Dryden Flight Research Center at Edwards at 7:26 a.m., subsequently reaching an airspeed of 195 knots and altitude of 7,500 feet.

The successful flight demonstrated the

characteristics and basic aspects of aircraft operations; specifically, the command and control link between the aircraft and mission-control station.

Later this year, the team will fly a second X-45A, the red bird, leading to multi-aircraft flight-test demonstrations next year.

Air Force Research Laboratory, headquartered at Wright-Patterson, was one of the many agencies directly involved in this landmark flight.

The team's follow-on testing will explore the boundaries of intelligent unmanned combat operations. The tests will occur every two to three weeks, phasing into multi-vehicle packages.

— Information provided by AFRL Public Affairs

'Spooky' attains full operational capability

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The Air Force's AC-130U gunship — nicknamed "Spooky" for its lethal, stealthy presence on the battlefield — has now achieved full operational capability, according to Air Force Special Operations Command at Hurlburt Field, Fla., and program officials here at Aeronautical Systems Center.

The milestone culminates ASC's Full Scale Development effort which began in July 1987, when the former Rockwell International (now The Boeing Co., Fort Walton Beach, Fla.) was awarded a contract to modify 12 new C-130H aircraft into the AC-130U configuration.

In 1992, the Air Force added a 13th AC-130U aircraft to the original purchase, replacing an AC-130H lost in Operation Desert Storm.

To support the warfighter, ASC's Special Ops SPO modified the existing AC-130H design to include a fully-pressurized crew compartment; fully-integrated, dual targeting/attack capability; upgraded, all-weather, attack radar; side-firing, GAU-12, 25-mm automatic Gatling gun; 40-mm Bofors cannon; and 105-mm howitzer.

According to program officials, the success of the AC-130U's devastating firepower and continued operational demands for gunship support have created urgent requirements for production of four more gunships.

— Information provided by ASC Public Affairs

AFMC celebrates 10 years of excellence

— By General Lester Lyles
AFMC Commander

On July 1, 1992, two proud organizations merged to meet the challenges of a changing Air Force. Air Force Systems Command and Air Force Logistics Command each came with storied histories, and for the first time, one Air Force organization was given "cradle to grave" responsibility for air and space warfighting capabilities.

As we celebrate Air Force Materiel Command's 10th Anniversary and march into the 21st Century focused on transformation, I'm reminded that AFMC was actually born as a transformational command, with a charter to revolutionize Air Force acquisition and sustainment.

Continuing traditions

We continue that great tradition today and have built a 10-year record of excellence in delivering innovative capabilities to our warriors — capabilities that start with research in our labs. From there, our product and test centers serve as the vital link between us and industry, ensuring the right capabilities are developed, tested and delivered to our warfighters.

And our air logistics centers ensure those capabilities are sustained throughout the product's life cycle. This has been our core mission for a decade and it continues to guide our efforts today.

Facing challenges

But the initial challenges in standing up a new organization with such a critical and expansive mission were daunting.

AFMC's first commander, Gen. Ron Yates, was a visionary. Under his leadership, AFMC overcame the challenges involved in merging the acquisition and sustainment functions. AFMC evolved from a transformational concept into an innovative organization overseeing research and development, testing, systems acquisition and sustainment.

I had the honor of taking command of what I consider the most important organization in the Air Force in April 2000. For me, this has always been my dream job.

When AFMC stood up, I was serving as vice commander and later commander at the Ogden Air Logistics Center. From there, I got the opportunity to command



Gen. Lester Lyles

the Space and Missile Systems Center. So, I've been in AFMC for much of its distinguished history and was very excited to get the opportunity to come back as your commander.

During the past two years, I've had the privilege of continuing the important work initiated by my three predecessors. I also inherited a world-class workforce.

But, like my predecessors, change has been the status quo. During my tenure, the Space and Missile Systems Center was realigned under Air Force Space Command.

We also completed closing two air logistics centers at McClellan and Kelly Air Force Bases. But, we've never taken our eyes off our target — delivering and sustaining revolutionary capabilities — capabilities the Air Force needed as it played a dominant role in several conflicts, including the ongoing war on terrorism.

Transforming for tomorrow

Throughout the past decade, one thing has remained constant. AFMC has always been ready and able to change to meet the needs of the Air Force and our nation.

And we are still changing today, perhaps more significantly than at any other time since our first days as an organiza-

tion. A very dangerous and changing world demands new capabilities and a new outlook on how we need to be organized as well as how we do business.

Our transformation is for real. It's not just a buzzword. The warfighters need tomorrow's technology today.

Today's environment demands out-of-the-box thinking. Old paradigms are being challenged and new approaches introduced.

Changing focus

At the same time, we are shifting from a program centric to an enterprise focus that looks at the big picture of what capabilities we need and how they fit together to produce dominant battlefield effects.

We are also actively engaged in ensuring our scientists and engineers remain a core part of our workforce. Their efforts represent our future.

We are instituting initiatives that will enable us to recruit and retain new talent to replace the abundance of experience in all mission areas we will soon lose to retirement.

Whatever the challenge, we've always remained faithful to our mission throughout the changes of the last decade, diligently providing sustainable warfighting capabilities to our warriors.

Product development

We've had a distinguished first decade. AFMC's success is seen on today's battlefield, a battlefield shaped by the capabilities we've produced and sustained.

This command has had a direct hand in developing capabilities that are right now in the hands of warfighters including the Global Hawk, the armed Predator, the Air Operations Center Weapon System, Tactical Datalink, the C-17 and the Joint Direct Attack Munitions.

Some of the products currently being developed in our labs are even more revolutionary and it will be exciting to see how they change future warfare. We've laid the groundwork for another electrifying 10 years.

We celebrate the past as we look to the future. Exciting times are ahead and I'm already looking forward to our 20th Anniversary!



New beginnings: Combining logistics and systems for superior support to warfighters

The Washington Redskins won the Super Bowl, "Batman Returns" was the number one movie, Bill Clinton was elected president and the Air Force Materiel Command was activated. The year was 1992.

The command came about as a merger between the Air Force Systems Command and the Air Force Logistics Command.

It had been a long journey, beginning in 1979, when Headquarters U.S. Air Force directed a study team under the joint chairmanship of Brig. Gen. Richard Saxer, Aeronautical Systems Division, and Col. Donald Litke, Oklahoma City Air Logistics Center, to review potential areas of overlap and duplication between Air Force Systems Command and Air Force Logistics Command.

However, the decisions ultimately leading to the merger had deep roots — roots going all the way back to their early days.

Forming new alliances

On April 1, 1961, the Air Research and Development Command's research, development and test functions were combined with the systems acquisition and procurement responsibilities of the Air Mobility Command, or AMC, to form the Air Force Systems Command, or AFSC, with headquarters at Andrews Air Force Base, Md.

Simultaneously, AMC, which retained responsibility for maintenance and supply activities, was redesignated the Air Force Logistics Command, or AFLC, with its headquarters at Wright-Patterson AFB, Ohio.

Gen. Charles McDonald, left, commander of Air Force Logistics Command, and Gen. Ronald Yates, commander of Air Force Systems Command, met in 1991 to discuss the upcoming merger of their commands into the Air Force Materiel Command. (Courtesy photo)

AFLC managed the requirements, funding, budgeting and all other duties relevant to controlling of spare parts to support weapon systems, as well as its other logistics functions.

Taking care of business

As the Vietnam War dominated the 1960s and early 1970s, both commands focused on quick solutions to operational needs. AFLC began modifying aircraft for dispatch and increased supply distribution to Southeast Asia.

The war brought new challenges to military logistics, such as building new air bases and supplying them with equipment and personnel. The climate also presented new problems in packaging, storage and maintaining weapon systems and equipment. As support for the war matured, AFLC provided rapid area supply support teams, rapid area transportation support teams and rapid area maintenance teams to increase maintenance capability.

Meanwhile, AFSC expanded areas such as electronic warfare in response to the North Vietnamese air defense systems. Modifying transports into gunships, improved reconnaissance sensors, the defense meteorological satellite program, forward looking infrared sensors and precision guided munitions all rep-

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New beginnings *continued from Page 5*

resented significant AFSC contributions to operations in Southeast Asia.

In addition, the Kennedy Administration's shift to a flexible response strategy underscored the need to modernize the Air Force's tactical air capabilities. The growth of Soviet power after the Cuban missile crisis challenged the entire spectrum of U.S. military capabilities.

Focusing on development

These factors led to a new wave of Air Force weapons development. Systems Command found itself managing a broad array of new tactical and strategic programs including the F-15 and F-16 fighters, the Peacekeeper ICBM, ground and air-launched cruise missiles, the Airborne Warning and Control System, the B-1B bomber and a new generation of surveillance satellites. These programs were the mainstay of AFSC activities during the 1970s.

During the Reagan Administration's military buildup of the 1980s, the pace and scope of Air Force acquisition again escalated, and the focus centered on modernizing strategic systems. Increased activity and defense spending brought acquisition reform issues to the forefront.

Media stories about overpriced spare parts and questionable overhead charges created a national sensation. Negative publicity, soaring federal deficits and cuts in domestic spending contributed to a political backlash against military programs in the mid 1980s, giving an enormous political impetus to reducing defense spending and overhauling the military's weapons acquisition practices. AFSC led the way for acquisition improvements with greater reliance on multi-year contracting to stabilize weapons programs and increased investment in modernization programs for the defense industrial base.

Once again internal efforts to improve the acquisition process were soon eclipsed by external pressures — Congress passed a diverse volume of reform legislation, increasing the legislative oversight of acquisition programs.

Two major features of the reform era were a probing examination by the President's Packard Commission on defense management that published a report recommending the defense acquisition structure be reorganized and streamlined to maximize efficiency and economy. At the same time, Congress passed the Goldwater-Nichols Defense Department Reorganization Act to strengthen civilian control over military acquisition and eliminate duplicate acquisition functions at service headquarters.

Upgrading forces

During this time, new weapon systems continued to upgrade forces. The B-1B was delivered and development on the C-17

Globemaster III transport began. Stealth technology, born in AFSC laboratories during the 1960s, was finding its way to the ramps in the form of the F-117 Nighthawk and the B-2 Spirit.

The weakening Soviet threat, deficits and the high cost of modern technology again triggered Air Force leaders to reassess research, development and logistics roles. In February 1989, President George Bush directed the Secretary of Defense to develop a plan to improve weapons procurement and Pentagon management. He also issued National Security Review, instructing DOD to develop a plan to implement the Packard commission's recommendations.

The resulting "Defense Management Report" was designed to fully implement the recommendation the commission made in 1986. The Secretary of Defense directed each of the military departments to develop proposals for achieving the report's objectives. The ongoing study encouraged the services to scrutinize their existing acquisition and logistical organizations with emphasis on reducing, streamlining and possibly merging commands.

Following guidelines

In 1989, Lt. Gen. Charles McDonald, U.S. Air Force Logistics and Engineering, and Lt. Gen. John Loh, commander of AFSC's Aeronautical Systems Division, initiated a study to consider merging AFSC and AFLC into one large acquisition and logistics command.

Air Force Chief of Staff Gen. Larry Welch met with Gen. Bernard Randolph, AFSC commander, and Gen. Alfred Hansen, AFLC commander, in August 1989 to announce his decision for a merger.

However, subsequent manpower concessions by both commands postponed the merger decision.

DMR Decision 943 proposed to eliminate duplication and unnecessary layers of management by disestablishing AFSC and combining the remaining staff with AFLC in 1990. At the same time, Mr. Donald Rice, Secretary of the Air Force, directed the AFLC and AFSC commanders to create a proposal to merge the two commands.

In December 1990, the two commanders appointed a special team to lay the groundwork for the integration. The team consisted of four members from AFSC, four from AFLC, two from Air Staff and one from the Defense Logistics Agency. The team nominated Air Force Materiel Command as the proposed name for the new command.

Finally, on July 1, 1992, Headquarters Air Force Materiel Command was activated. At the same time, Headquarters Air Force Logistics Command and Headquarters Air Force Systems Command were inactivated and their units reassigned to AFMC.

— Ms. Libby VanHook, AFMC Public Affairs



Gen. Merrill McPeak, former chief of staff of the Air Force (left), and Gen. Charles McDonald, former commander of the Air Force Logistics Command, during the activation ceremony for the Air Force Materiel Command in 1992. AFLC and the Air Force Systems Command were inactivated before AFMC was activated. (Courtesy photo)

Highlights — AFMC's first decade



On January 10, 1991, Secretary of the Air Force Donald Rice announced that the Air Force Systems Command and the Air Force Logistics Command would be inactivated and the Air Force Materiel Command would be activated at Wright-Patterson Air Force Base, Ohio, July 1, 1992.

The announcement marked the beginning of a complete overhaul of the Air Force structure to meet the demands of a new environment marked by the Cold War termination and the presence of a large federal deficit.

AFMC's first decade has seen four commanders and many changes in the way it helps the Air Force combat units deliver global reach and global power. The following highlights show the changes that occurred under each commander.

1992-1995 — The Yates years

To AFMC's first commander, Gen. Ronald Yates, fell the challenge of making Integrated Weapons System Management, or IWSM, a reality. That reality was to give substance to innovative management processes that would develop, field and continue to support major Air Force systems throughout their life cycles.

At the same time, Gen. Yates also had to establish an efficient, well-coordinated organizational structure that could direct the command's diverse subordinate elements without being unnecessarily burdensome to them.

A new framework

Within six months of AFMC's activation, he introduced a set of control mechanisms called the Command Management Framework, or CMF, to better focus to the command's five primary mission areas: Product management, support and industrial operations, science and technology, test and evaluation and base operating support.

The CMF's most significant innovation was its set of mission element boards — one MEB for each of the command's five mission areas made up of representatives from the Office of the Secretary of the Air Force, USAF headquarters, AFMC headquarters and all of the AFMC centers supporting the particular mission element involved.

This arrangement differed from more traditional command instruments in that it gave AFMC's field organizations much

greater influence over command-wide resource and workload allocation than equivalent-level units received elsewhere in the Air Force.

Improving efficiency

Soon after taking command, Gen. Yates evaluated AFMC headquarters' functions; looking to improve their efficiency and lessen the impact of looming personnel reductions.

But other adjustments followed, as well. In 1993, AFMC transferred its information processing activities to the Defense Information Systems Agency, even as it took control of Kirtland Air Force Base, N.M. That same year the Base Realignment and Closure Commission marked Newark AFB, Ohio, for closure, and Rome Laboratory, at soon-to-be-closed Griffiss AFB, N.Y., for enclave status, which is a military base without its usual support organizations.

Lean logistics

The command's acquisition managers learned some hard but valuable lessons from the troubled C-17 transport program in 1993, and AFMC's Lean Logistics program began transitioning the Repairable Supply System from a structure based on consumption projection to one driven by actual requisitions and aircraft availability goals.

Air Force-wide adoption of two-level maintenance began that fall. In 1994, the cumulative effects of a decade of annual defense budget reductions forced leaders to temporarily accept a procurement



Gen. Ronald Yates

selection process called weapon system banding. Under Project Reliance banner, AFMC's science and technology researchers worked with their DOD counterparts to combine redundant research programs.

A parallel effort, Project Alliance, fostered sharing that information with academic and industry researchers.

Exchanging science and technology products with other nations was also encouraged, and in fiscal year 1994, AFMC research laboratories cooperated with their counterparts in several states of the former Soviet Union to conduct more than 60 technology exploitation projects.

1995-1997 — The Viccellio tenure

Eight days before Gen. Henry Viccellio, Jr. took command of AFMC, he received news that would greatly affect the organization he was about to lead.

The 1995 BRAC Commission recommended closing McClellan Air Force Base, Calif., including the Sacramento Air Logistics Center, and eliminating the San Antonio ALC as a part of its proposed realignment of Kelly AFB, Texas.

To the commission, those two bases simply represented unneeded capacity. To the command, however, they formed an important part of AFMC's ability to support depot "surge" operations during a contingency of any significant duration.

Workload competition

To deal with the consequences of the BRAC decisions, Gen. Viccellio initially turned to "privatization-in-place," the solution AFMC had adopted for its Aerospace Guidance and Meteorology Center at Newark AFB, Ohio.

Later, however, the Air Force devised another option called "workload competition" for Sacramento ALC and San Antonio ALC.

That plan allowed AFMC organizations and private industry to bid, separately, or

joined together in teams, for the closing ALCs' depot workloads.

Acquisition reform

By late 1995, acquisition reform was fast becoming an institutionalized DOD strategy, and USAF headquarters-sponsored process improvements were being studied and adopted across the commands. This included the first applications of the "Lightning Bolt" acquisition initiatives and introducing commercial standards and specifications.

In 1996 AFMC began to deploy elements of the depot repair enhancement program and the contractor repair enhancement program.

These programs would bring fundamental change to the ALCs and their contractors' repair facilities — speeding up the repair process meant that AFMC could save money by buying and storing fewer spare parts.

Research and development

AFMC's research and development community also faced pressures to reduce, streamline and consolidate. In the spring of 1996, DOD published Vision 21, a blueprint for restructuring and revitalizing the services' numerous laboratories and test centers, and the command responded



Gen. Henry Viccellio, Jr.

accordingly. By fall, plans were well advanced for merging the Armstrong, Phillips, Rome and Wright Laboratories into a single organization called the Air Force Research Laboratory.

In April 1997, AFRL's Headquarters activated at Wright-Patterson AFB, Ohio, and the formal consolidation followed six months later.

1997-2000 — The Babbitt initiatives

AFMC's third commander, Gen. George Babbitt, introduced the command to the terminology and practices of the contemporary business world. He believed modern commerce methods — if applied appropriately — could make the command as efficient and effective as possible.

He believed "succeeding in business" meant using fewer resources with greater skill to provide the warfighter with better support, and more of it.

One of the first consequences of Gen. Babbitt's business approach was completely restructuring the Command Management Framework.

Business areas

In the summer of 1997 he replaced its five mission element boards with eight "Business Areas," each under the direction of a chief operating officer.

Six of those areas supported the com-

mand's external customers: science and technology, test and evaluation, information services, product support, supply management and depot maintenance. The other two, information management and installations and support, served internal customers.

Cost management, rather than budget management, was to become the preferred focus. AFMC program officials were encouraged to look to the cost of their products instead of the cost of their processes. Accountability received renewed attention and AFMC commanders were asked to report the financial health of their organizations on a regular basis.

Reorganizing

Organizational changes affected AFMC in 1998, including redesignating the Air Force Development Test Center as the Air Armament Center, and absorbing the



Gen. George Babbitt
Babbitt continued on next page

Babbitt continued

Human Systems Center into the Aeronautical Systems Center at Wright-Patterson.

In addition, the Cataloging and Standardization Center was closed, even as AFMC continued to reduce its presence at both Kelly and McClellan locations.

Fresh changes in federal law reshaped the competition that would divide those workloads, and by year's end new govern-

ment-private industry teams had already been formed at the ALCs in Ogden, Utah and Oklahoma City, Okla.

Facing new challenges

These novel teaming arrangements faced their first acid test during Operation Allied Force, the NATO air campaign conducted over Kosovo in the spring of 1999, and by all accounts they met the challenge.

Nonetheless, post-contingency reviews

showed just how seriously the Balkan "surge" had depleted some important USAF materiel reserves.

AFMC's depots worked with a will to replenish their stocks, but that effort carried a price of its own. In October 1999, Gen. Babbitt testified before Congress about the hidden cost of chronic spares underfunding — a crippling affect he called "the bow wave."

2000-Present — Lyles leads the way

When Gen. Lester Lyles assumed command in April 2000, he signaled his intent to follow through with much of the "business approach" his predecessor initiated.

However, he also recognized that shifting mission boundaries were affecting AFMC's central role in managing acquisitions — especially in the space and command and control arenas — and that repeated science and technology budget reductions had undermined the command's preeminence in aerospace research and development.

In the summer of 2000, he began to address those issues by repositioning AFMC in five key focus areas: Studies and analyses, modeling and simulation, aging systems, leveraging commercial technology and responsiveness to customer needs.

But he faced other challenges, as well. In addition to aging weapon systems, the command had to deal with an aging civilian employee population.

Workforce shaping

AFMC's response, called the 2005 Workforce Shaping Plan, entered its second year in 2000, and in a summit conference held that winter AFMC leaders acknowledged the difficulties involved in recruiting and retaining young scientists and engineers.

Acquisition processes were still under intense scrutiny by the USAF's civilian leadership, and AFMC management officials met regularly with their labor counterparts in the American Federation of Government Employees to discuss such matters as alternate dispute resolution, and to negotiate renewal of the Master

Labor Agreement before it expired in late 2001.

Closing installations

Closure phases for the ALCs at McClellan and Kelly AFB's locations continued towards completion in July 2001.

By then, AFMC already knew that its Space and Missile Systems Center would be transferred to the Air Force Space Command in fiscal year 2002.

In addition, under a proposed "City-Base Plan" most of Brooks AFB, Texas, was likely to be turned over to the city of San Antonio not many months thereafter.

Transformation

And to add to that sense of change-driven unease, there were the results of the latest Quadrennial Defense Review, and Defense Department leadership's increasingly frequent reference to a new and still vaguely defined concept called "Transformation."

What did it mean? When would it begin? And what would it entail for AFMC?

Developing new systems

On the other hand, the 12-month period beginning in February 2001 was a banner year for new systems.

The Collier Trophy-winning Global Hawk reconnaissance vehicle entered its engineering, manufacturing and development phase. Lockheed Martin's X-35 won the Joint Strike Fighter competition.

The Joint Direct Attack Munition and the T-6 primary trainer entered full production, and the F-22 air superiority fighter and the Joint Air-to-Surface Standoff Missile got approval for low-rate initial production status.



Gen. Lester Lyles

Of course, all those achievements had to be kept in perspective with the terrible events of September 11, 2001, and the subsequent actions taken in Afghanistan and elsewhere by the U.S. and its coalition partners.

How long the war on international terrorism will continue is unknown and where it will be fought next is uncertain. Even the terms of victory remain unclear.

No matter. The men and women of AFMC, civilian and military alike, will continue to do their part — and more — until the war is won.

The highlights from AFMC's first decade were provided by Mr. George Cully, AFMC History Office

A personal perspective

Charting the change of warfighter support

— By Mr. John Weber
AFMC Historian

On January 10, 1991, Secretary of the Air Force Donald Rice announced that Air Force Logistics Command and Air Force Systems Command would combine to form a single, streamlined organization — the Air Force Materiel Command — at Wright-Patterson Air Force Base, Ohio.

I had worked for AFLC for nearly five years by 1991, knew that the functions of both commands had existed previously in one command — the Air Materiel Command — in the 1940s and 1950s, and was aware of previous unconsummated efforts in recent years to combine the functions of both commands.

Yet, by early 1991, I also recognized that reductions in the defense budget, legislation that streamlined defense acquisition processes and release of a volley of defense management review directives indicated the time had arrived to integrate the two commands.

Indeed, as chief of a staff office in Headquarters AFLC, I knew some difficult missions were before me, not to mention unknown variables that might lead to personal employment uncertainties. I had little time to ponder personal concerns surrounding the impending integration scheduled for July 1, 1992. Almost immediately, my office received a variety of taskings relative to the overall merger of the two commands and the creation of an integrated headquarters staff for the new command.

A team in place

In late January 1991, I learned of the formation of a small team comprised of selected key deputy chiefs of staff from each command's headquarters staff, under the co-direction of one person from each command.

Known as the Executive Committee, or EXCOM, the team was chartered to craft a plan to form Headquarters AFMC under the principles of the integration and was scheduled to hold its kickoff meeting in early February at Arnold AFB, Tenn.

A few days prior to the meeting, my counterpart AFSC command historian and I received notice that we were to brief the EXCOM on the history of both commands, as a means for the EXCOM to use this history to facilitate its important planning endeavors.

I traveled to Arnold on February 6 with the team that would represent AFLC on the EXCOM: the chief of staff, Maj. Gen. Edward Bracken, and five key deputy chiefs of staff for selected functions. As our C-21 aircraft landed and taxied toward its appointed parking place on the Arnold ramp, we noticed a greeting party standing smartly in line on the apron.



The Executive Committee was chartered to draft a plan forming Headquarters AFMC is shown here during a meeting February 1991 at Arnold AFB, Tenn. Back row from left to right: Brig. Gen. Lester Lyles, Brig. Gen. John Phillips, Dr. Michael Gorn, Mr. John Weber, Brig. Gen. Patricia Hinneburg, Brig. Gen. Roy Hodges. Seated from left to right: Brig. Gen. Robert Drewes, Maj. Gen. Willaim Hallin, Maj. Gen. Robert Rankine, Maj. Gen. Edward Bracken, Brig. Gen. John Nauseef, Mr. L. Keith Dumas, Maj. Gen. Kenneth Meyer, Maj. Gen. John Voorhees, Brig. Gen. Dennis Doneen and Brig. Gen. Milton Haines. Gen. Lyles is the only EXCOM member remaining on active duty today. (Courtesy photo)

Headquarters AFSC's counterpart EXCOM contingent, led by the chief of staff, Maj. Gen. Kenneth Meyer, had arrived from Andrews AFB, Va., only minutes earlier and provided a warm and touching welcome to the AFLC representatives and thus established an appropriate air of cooperation as the team set to tackle the many difficult tasks that lay ahead.

Ironically, only one of the EXCOM members remains on active duty and he now presides over

AFMC on the command's tenth anniversary — Gen. Lester Lyles, then the AFSC deputy chief of staff for requirements.

Whether it was this special welcome or the professionalism of the EXCOM members to set aside any uniqueness or parochialism of their respective commands, the EXCOM helped immediately to chart a clear and unbiased course to form AFMC.

A quick study

Meanwhile, I knew I needed to grasp quickly the mission and heritage of AFSC, a foreboding task for one who had only five years of experience with AFLC and had spent almost three times that amount of time with an operational command, but there was little time for remedial study.

The on-going AFLC mission could not be neglected, and there came a continuing rapid-fire stream of taskings associated with the formation of the new headquarters.

These taskings included development of new position descriptions for AFMC functional staff members, thorough review and

rework of functional operating publications, identification of data automation requirements and hardware (however elementary compared to today's capabilities and standards), and numerous issues unique to particular functions. Indeed, this integration was not short on planning, and the resulting programming plan fleshed out every conceivable issue, to the extent that the plan rivaled a good-sized telephone book.

But all of the planning and coordination proved valuable many times over. Perhaps there was no better example of the benefits of tedious planning and coordination in my function than the movement of AFSC's historical archives from Andrews to Wright-Patterson — all 686 archival storage boxes.

This holding included classified materials, and on-going renovation of the AFLC facility that would house the AFMC staff upon activation of the command necessitated the aggravating temporary storage of the materials in a secure facility at Wright-Patterson.

Undaunted by these complications, my office worked out the myriad details to complete the transfer of this important material, along with all other of the many requirements associated with the integration, in time to allow the office to stand up proudly with the rest of the new command on July 1, 1992.

Learning new missions

While still learning the logistics and sustainment mission, I now was exposed to a variety of other highly professional and profiled missions, including acquisition, test and evaluation, and science and technology. With some 130,000 military and civilian personnel and management responsibility for more than half of the Air Force's annual budget, AFMC was indeed a large and encompassing command.

My office now had more than double the number of field offices over which it had to provide functional policy and guidance. AFMC assumed the responsibility for operating major product centers, air logistics centers, test centers, laboratories and several specialized centers.

Thereby, AFMC became the single Air Force organization responsible for managing every aspect of a weapon system from its inception on the drawing board, support through its operational life, and its final disposition. AFMC was an important pillar in the structure of the United States Air Force.

There were challenges

The careful, time-phased planning and preparations stood AFMC in good stead. The command's first ten years were not without challenges, but the solid foundation laid in the early 1990s prepared the command to carry out its mission amidst base closures, personnel reductions, acquisition reform, spare parts shortages, depot enhancements, cost competitions and laboratory reorganization, to name a few.

All the while, AFMC personnel stood tall to develop and test the Air Force's newest weapons systems and munitions, sustain the current weapon system inventory, remain on the cutting edge of technology to ensure future dominance and provide important



Top: Headquarters Air Force Systems Command at Andrews AFB, Va. Middle: Headquarters Air Force Logistics Command at Wright-Patterson AFB, Ohio. Bottom: Headquarters Air Force Materiel Command today.

base operating support.

It's been valuable

Indeed, AFMC proved its mettle in 1999 during Operation Allied Force, the NATO air campaign over Kosovo, and since the surge of terror in September 2001, during the on-going efforts of Operations Enduring Freedom and Noble Eagle.

Now, as AFMC marks its tenth anniversary with a workforce reduced by nearly 40 percent since 1992, the command continues to provide the requisite support the Air Force demands.

AFMC is poised to participate in efforts, now in a nascent stage, to "transform" the Air Force to ensure the service preserves its current advantages and addresses emerging threats in the national and international security environments.



10 YEARS OF AFMC SUPPORT TO THE WARFIGHTER

The leader in equipping and sustaining America's air and space force



THE WARFIGHTER'S FIRST CHOICE

Graphic montage created by Maj. Michael Kelly

Command mission constant over decade of service

"What we in materiel command do today will prepare America to defend tomorrow." Gen. Ronald Yates, former Air Force Systems Command leader, had no idea how those words would ring true when he assumed command of the newly formed Air Force Materiel Command July 1, 1992.

As Gen. Yates and Air Force members bid farewell to AFSC and the Air Force Logistics Command and welcomed newcomer Air Force Materiel Command to the family, service leaders hoped to create a single manager responsible for buying weapon systems and supporting throughout their life cycles to provide better support to the warfighter.

Whether the philosophy has taken the form of Gen. Yates' Command Management Framework, Gen. George Babbitt's business areas or Gen. Lester Lyles' current mission areas, AFMC's number one goal remains today what it started as a decade ago — being the Air Force's single acquisition command charged with arming the Air Force's warfighters and sustaining them in battle.

Facing challenges every day

Every day, AFMC people are living up to the challenges that come with that goal and they are doing it very well, according to Gen. Lyles, current AFMC commander.

"Our people have had their hands on all the equipment Air Force people dropping bombs in Afghanistan and those supporting them on the ground have used," Gen. Lyles said.

"In peace time, AFMC people researched, developed, built and tested all the systems and equipment used in every aspect of the mission," he said. "In today's wartime environment, we continue to sustain and improve those systems."

A diverse mission

Through the past decade AFMC has had its gains and losses. It lost San Antonio Air Logistics Center at Kelly Air Force Base, Texas, and Sacramento ALC at McClellan AFB, Calif., to Base Realignment and Closure activities. Its Space and Missile Systems Center at Los Angeles AFB, Calif., has been realigned to U.S. Space Command with headquarters at Peterson AFB, Colo.

But despite the losses, experts at the remaining command units absorbed the workloads coming from closed facilities and continue to spearhead the creation, integration and support of cutting-edge weapon systems, providing tomorrow's technology to today's warfighter.

Today, AFMC experts manage a collective annual budget of nearly \$41.6 billion, which is more than half the Air Force's total operating budget. From its 10 geographically dispersed bases, AFMC also supports other U.S. and allied military forces, and handles major aerospace responsibilities for the Defense Department. AFMC professionals routinely fulfill leadership and support duties in DOD operations, most notably Enduring Freedom, Noble Eagle, Northern Watch and Southern Watch.

Realizing Gen. Yates' vision of preparing America to defend tomorrow, AFMC organizations tackle the Air Force's most diverse mission of any other major command.

That diversity comes in many forms.

Air logistics centers

Ogden Air Logistics Center at Hill AFB, Utah, modifies and

maintains nearly 300 F-16s each year and its F-16 production facility knocked five weeks off the depot turnaround time to combat units. To support Operations Enduring Freedom and Northern and Southern Watch, Ogden experts shipped nearly 9 million pounds of munitions, electronics, avionics, radar, navigational and laser systems for nine different aircraft.

The Oklahoma City ALC at Tinker AFB, Okla., repairs and maintains a variety of aircraft that includes bombers, refuelers and reconnaissance aircraft, all used in the war against terrorism and homeland defense. Many crucial airborne accessories are also maintained here, including life support systems like oxygen equipment and ejection seats.

Oklahoma City also manages and repairs engines that power a wide variety of Air Force and Navy fighter aircraft like the B-1B and B-2 bombers and the backbone of America's defense — the B-52 Stratofortress, as well as cruise missiles.

The Warner-Robins ALC at Robins AFB, Ga., provides warfighters quality depot maintenance and logistics support for F-15, C-5, C-141, C-130 and all Air Force helicopters as well as logistics management support for the C-17 Globemaster III and U-2.

Col. Kent Mueller, Air Force Special Operations Command logistics director, said the synergy of AFMC's air logistics centers, as well as support from experts at Wright-Patterson AFB, Ohio, the AFMC battle staff and the AFSOC worldwide logistics readiness network has been awesome during the war on terrorism. "Working seamlessly, they produced elegant, as well as brute force logistics success stories on parts needs from 25-cent nuts and bolts to end items like auxiliary power units."

Test centers

In addition to depot work at ALCs, Edwards AFB, Calif., is home to the Air Force Flight Test Center, U.S. Air Force Test Pilot School, NASA's Dryden Research Center and considerable test activity America's commercial aerospace industry conducts. From developing the country's first jet to the Air Force's newest fighter, the F-22 Raptor, test forces have played a role in virtually every aircraft to enter the Air Force inventory since World War II.

The same holds true for Arnold Engineering Development Center at Arnold AFB, Tenn. AEDC's contribution to the warfighter is ground testing all Defense Department aerospace systems being used today both in development and through each system's service life. The center is currently testing weapons systems such as the F-22 Raptor and the Joint Strike Fighter, ensuring America's air dominance well into the 21st century.

Product centers

Air Force bombers, fighters, airlifters, tankers and intelligence, surveillance and reconnaissance assets that Aeronautical Systems Center experts developed and sustained are in action every day. To guarantee agile logistics support and immediately infuse the newest technologies, more than 50 acquisition surges have already been implemented and more are planned.

Experts at 311th Human Systems Wing at Brooks AFB, Texas, acquire and sustain life support, nuclear-biological-chemical rapid response, laboratory analysis, aeromedical equipment

and medical information systems that support the warfighter from basic training throughout their entire career.

Roughly 72 percent of all the weapons dropped in Afghanistan were "smart" weapons developed and tested at AFMC's Air Armament Center at Eglin AFB, Fla. Munitions successes include the Joint Direct Attack Munition, the EGBU-15 enhanced guide bomb unit and AGM-130 air-to-ground missile used to destroy tunnel complexes and cave entrances in Afghanistan.

Technology developed at the 377th Air Base Wing at Kirtland AFB, N.M., plays an increasingly important role in countering terrorist threats against the nation.

Technologies to foil biological and nuclear terrorists, tools to help emergency and first-response people, technologies and procedures for improving airport and border security and tools to enhance intelligence-gathering capabilities are just some of the things agencies here are working on.

Electronic Systems Center experts at Hanscom AFB, Mass., played a vital part in establishing the Continental NORAD Region Operations Center as an immediate response to the threat of terrorism. This included installing ESC's theater battle management core systems and the NORAD Contingency Suite which enabled Air Force leaders to coordinate regional air defense by rapidly disseminating air tasking orders and significantly improving U.S. operational situational awareness.

Science and technology

And the Air Force Research Laboratory experts lead the way for discovering, developing and integrating affordable warfighting technologies for aerospace forces. It partners with government, industry and academia, pushing the limits of science and technology to accomplish this.

AFRL leverages its technological information to offer potential solutions to warfighter needs for new technologies providing them a rapid response capability, cementing the Gen. Yates vision from a decade earlier. "AFMC accepts and executes and extraordinarily complex and diverse mission," Gen. Lyles said. "And while the objective is clear — world-class support for America's warfighter — the breadth of our responsibilities makes it difficult to explain how much capability we provide. We're clearly leaving our mark and providing technologies and weapon systems that directly support the warfighter."

The bottom line is just as Mr. Walt Spicer, sustainment division chief in the C/KC-135 system program office at Tinker, who spent 13 years at AFSC before transferring to what was then the plans and programs directorate, said. "We're more responsive to our customer and that's the warfighter. When I go home at night, that's how I measure my worth to the Air Force."

"The thing to remember is many of these weapon systems we're working on today are going to be around for years to come, so we've got to be able to make better use of what we've got. That means we've got to make sure we can upgrade these systems in a timely fashion to respond to the threats out there. I think the command merger has done that."

— Tech. Sgt. Carl Norman, AFMC Public Affairs

An Air Force crew chief checks the engine intake area of a B-1B Lancer for cracks during a routine safety check. The B-1B is the backbone of America's long-range bomber force and is managed and receives engine repair at the Oklahoma City Air Logistics Center at Tinker AFB, Okla. (Air Force photo by Staff Sgt. Larry Simmons)

Air Force Materiel Command

for

DUMMIES

Air Force Materiel Command Emblem

Do you know what the AFMC crest stands for? The official description is as follows: On a shield azure of Air Force blue, a gear encircling a star, all argent white, the star charged with a disc in red, flanking the sides of the gear a pair of stylized yellow wings or tips upward. It was approved for use on July 29, 1991.

The heraldic significance of the crest is as follows: The colors blue and golden yellow, together with the stylized wings, are representative of the United States Air Force. The design formed by an Army Air Corps white star and centered red disc surrounded by a toothed gear is taken from the insignia worn by members of the Air Materiel Command, a functional predecessor of AFMC. This device is symbolic of the technical missions performed by the command in service to the advancement of aerospace power for our nation's continued freedom.

AFMC Vision

The recognized leader for equipping and supporting America's air and space force — the warfighter's first choice.

AFMC Mission

To develop, acquire and sustain aerospace power needed to defend the United States and its interests — today and tomorrow.

AFMC Goals

Satisfy our customer's needs in war and peace.

Enable our people to excel.

Sustain technological superiority.

Enhance the excellence of our business practices.

Operate quality installations.

AFMC Senior Leadership, 1992 — Present

Commanders

| | |
|---------------------------|-------------------------------|
| Gen. Ronald Yates | July 1992 — July 1995 |
| Gen. Henry Viccellio, Jr. | July 1995 — May 1997 |
| Lt. Gen. Kenneth Eickmann | 9 May — 29 May, 1997 (Actubg) |
| Gen. George Babbitt | May 1997 — April 2000 |
| Gen. Lester Lyles | April 2000 — Present |

Vice Commanders

| | |
|--------------------------------|-------------------------------|
| Lt. Gen. Charles Searock, Jr. | July 1992 — April 1993 |
| Lt. Gen. Dale Thompson, Jr. | May 1993 — March 1995 |
| Lt. Gen. Lawrence Farrell, Jr. | May 1995 — March 1997 |
| Maj. Gen. Michael Kostelnik | March 1997 — December 1997 |
| Lt. Gen. Stewart Cranston | December 1997 — February 2000 |
| Lt. Gen. Charles Coolidge, Jr. | February 2000 — Present |

Executive Director

| | |
|----------------------------|---------------------|
| Dr. J. Daniel Stewart, SES | June 1999 — Present |
|----------------------------|---------------------|

Command Senior Enlisted Advisors/Command Chief Master Sergeants

| | |
|--------------------------------------|-----------------------|
| Chief Master Sgt. Michael DiGregorio | July 1992 — June 1994 |
| Chief Master Sgt. Kathy Ballard | June 1994 — May 1996 |
| Chief Master Sgt. Marc Mazza | May 1996 — July 2001 |
| Chief Master Sgt. Dave Mimms | July 2001 — Present |



Chief Master Sergeant presides over ceremony

MAXWELL AIR FORCE BASE, Ala. — Chief Master Sgt. of the Air Force Jim Finch reenlists (left to right) Master Sgt. Darrell Gage, Master Sgt. Pamela Finch and Tech. Sgt. James Overton, all assigned to the Standard Systems Group, during a recent ceremony at the Enlisted Heritage Hall here.

— Information provided by SSG Public Affairs

Tinker bids farewell to NATO AWACS crew

TINKER AIR FORCE BASE, Okla. — After more than seven months of supporting the United States, NATO Airborne Warning and Control System crews recently left Tinker, their deployed location during Operation Noble Eagle.

NATO crews deployed here from their home base in Geilenkirchen, Germany, in response to the Sept. 11 terrorist attacks and Article 5 of its charter, which states that an attack on one member of the alliance is an attack on all.

Within one hour of the attacks, 552nd AWACS crews took to the skies in support of NORAD's air sovereignty mission and have been providing continuous radar coverage ever since.

The United States asked NATO to deploy their AWACS to lower the operational tempo of the U.S. AWACS fleet, which consists of 28 low density, high demand airborne.

In addition to the U.S., Norway and Germany, other members of the NATO detachment included the United Kingdom, Belgium, Canada, Denmark, Greece, Italy, the Netherlands, Portugal, Spain and Turkey.

— Information provided by OC-ALC Public Affairs

UK's Air Chief Marshal visits JSF at Edwards

EDWARDS AIR FORCE BASE, Calif. — Commander in Chief of the United Kingdom's Strike Command, Sir John Day, recently visited the Joint Strike Fighter Integrated Test Force here to learn more about the Flight Test Center's role in developing the new fighter.

Escorted by Maj. Gen. Doug Pearson, commander of the Flight Test Center at Edwards, Sir Day met with experts from Edwards and officials from the JSF Joint Program Office in Washington, D.C. After a recap of the successful contractor fly-off at Edwards, he received an update on how the fighter is progressing through the System Development and Demonstration phase of U.S. defense acquisition.

During the visit, Sir Day said the United Kingdom and the United States have been working through the challenges created by the countries' two different defense acquisition strategies "superbly well." He added the expertise and contributions of both nations are critical to the final operational solution the JSF will provide.

The first JSF test aircraft is slated to arrive at Edwards in October of 2005.

— Information provided by AFFTC Public Affairs

Environmental directorate tops in A-76 study

ROBINS AIR FORCE BASE, Ga. — Mr. Steven Coyle, Warner Robins Air Logistics Center Environmental Management Directorate director, could not contain a smile recently when announcing to his work force the tentative results of a two-year A-76 study.

Mr. Coyle let a hand-held sign convey the news that the directorate will retain the 49 government personnel authorizations that were under review during the study.

The A-76 study was a cost comparison of environmental management activities to determine if the work could better be done by private industry. The areas studied included air and water quality management, solid waste management, hazardous materials, pollution prevention and nature resources.

A tentative decision to retain the functions in-house has been determined. The announcement is tentative because a 20-

day public review period is required in which a protest may be filed.

Once the review period is complete, and if there are no protests filed, the directorate will begin a 90-day transition period. The transition would be complete around October.

— Information provided by WR-ALC Public Affairs

Lt. Gen. Looney assumes command of ESC

HANSCOM AIR FORCE BASE, Mass. — Lt. Gen. William Looney officially assumed command of the Electronic Systems Center May 28 with Gen. Lester Lyles, commander of the Air Force Materiel Command, presiding over the assumption of command ceremony.

Gen. Looney succeeded Lt. Gen. Leslie Kenne, who left in mid-April to become the new Air Force deputy chief of staff for warfighting integration. In the interim, Brig. Gen. Robert Latiff served as ESC commander.

Before arriving at Hanscom, Gen. Looney served as commander, Fourteenth Air Force; and component commander, U.S. Air Force Space Operations, U.S. Space Command, Vandenberg Air Force Base, Calif. He is a command pilot with more than 3,900 flying hours, including 2,500 hours in the F-15 Eagle.

— Information provided by ESC Public Affairs

AFRL awards five-year contract to Virginia firm

ROME, N.Y. — The Air Force Research Laboratory Information Directorate has awarded a five-year contract to Booz Allen and Hamilton Inc. of McLean, Va., to monitor and improve military intelligence operations.

The agreement, "Configuration Management," will be funded at \$1,053,624 for the first year, with the total contract expected to be in excess of \$5 million.

Engineers will develop a configuration management database to be used to track problem reports and change requests from intelligence analysts around the world. Under the contract, the division will also develop and maintain Internet Web pages for more than 50 intelligence programs.

— Information provided by AFRL Public Affairs

B-1B achieves first triple munitions drop

A global power bomber combined test force crew flying a B-1B at Edwards AFB, Calif., accomplished an Air Force first by successfully targeting three different weapon types against three separate targets in a single, 20-second bomb pass recently.

Part of the B-1 Block E computer upgrade test program, the effort showcased the system's new weapons flexibility as the crew released one MK-84 2,000-pound gravity weapon, three MK-82s 500-pound gravity weapons, and four CBU-89s 1,000-pound class cluster munitions, each striking targets approximately 10,000 feet apart.

Showing flexibility

"Today marks a major test accomplishment," said Lt. Col. Arnie Bunch, global power bomber combines test force director. "The team demonstrated conventional weapons flexibility without any glitches. As we add precision weapons to the mix, the B-1 warfighter should have unmatched strike capability long into the future."

"This is the first time in Air Force history that an aircraft's on-board weapon system has allowed employment of multiple weapon types against multiple, separated targets, automatically releasing munitions at the proper time and position in a single bomb run," Col. Bunch said.

Reaching milestones

"This release accomplished what would typically require three aircraft passes or a coordinated strike of three aircraft. Using this new capability, the Air Force will be able to dramatically decrease the number of assets put in harm's way during future aircraft attacks."



The B-1B Lancer recently achieved a first when a combined test force crew successfully targeted three different weapon types against three separate targets in a single bomb pass at Edwards AFB, Calif. The B-1B system program is managed at Aeronautical Systems Center at Wright-Patterson AFB, Ohio. (Air Force photo)

A major program milestone, the demonstration also was the first step in developing improved weapons flexibility for the B-1. In the next few weeks, the test force will demonstrate further weapons flexibility by dropping both precision and non-precision weapons in a single run, Col. Bunch said.

Moving forward

"This demonstrated weapons flexibility is a giant step forward in the B-1's overall conventional mission upgrade program," said Col. Mike Miller, B-1 system program director, Aeronautical Systems Center at Wright-Patterson AFB, Ohio.

"It puts the B-1 closer to fulfilling its role as the backbone of the bomber fleet as envisioned by the USAF bomber roadmap," he said. "The next critical step in this maturation is successful com-

pletion of the defensive system upgrade program, now in the early phase of testing."

First fielded in 1986, the B-1B was dedicated to a nuclear deterrence role.

Following the breakup of the Soviet Union in the early 1990s, the Air Force reassessed the nation's bomber force and made a decision to focus the B-1 on a conventional warfighting role.

In 1993, the Air Force initiated a series of phased upgrades, known collectively as the conventional mission upgrade program, focused on increasing the B-1's lethality, survivability and sustainability in the conventional role.

Putting safety first

It will enable the B-1 force to provide the nation with a massive, penetrating, long-range precision attack capability, while ensuring the survival of the aircraft and its crew in a

modern threat environment.

In summer 2003, the B-1 Block E program will begin tests to integrate the joint standoff weapon and joint air-to-surface standoff missile, which by approximately 2004 will add precision standoff capability. At the same time, new, upgraded computer systems will be installed.

Fleet transformation

"Air Combat Command enthusiastically anticipates completion of the B-1 Block E program," said Col. Gregory Feest, ACC deputy director of requirements.

"As we transform the bomber fleet to be more responsive in striking targets, the B-1's weapons flexibility will provide the Joint Force Air Component Commander immediate, on-call, unparalleled strike options."

— Lt. Col. Mark Spillman, B-1B Program Office



F-16s from the 416th Flight Test Squadron, armed with ALQ-167 radar jamming pods, fly in formation with the F-22 Raptor. The fighters are assisting with F-22 flight-testing by simulating a series of radar jamming scenarios against the Raptor. (Photo by Mr. Kevin Robertson, AFFTC)

Avionics tests give pilots edge

Flight test experts at the F-22 Combined Test Force at Edwards Air Force Base, Calif., are putting the Raptor's integrated avionics suite to the test and ensuring the fighter's future pilots are all knowing and their enemies are kept in the dark.

The test force is in the midst of testing the Raptor's integrated avionics suite's performance in an array of electronic countermeasure scenarios.

Integrated capability

The suite is equipped with integrated sensor fusion capabilities that encompass electronic warfare and radar systems, as well as communication, navigation and identification capabilities.

The Air Force's current inventory of fighter aircraft has separate radar and radar warning displays that offer individual pieces of information to their pilots.

With the Raptor's sensor-fused suite, all aircraft sensors and displays work together to provide pilots a single, integrated picture of their tactical situation.

In order to evaluate the integrated suite, the test force must simulate enemy threats against the Raptor. F-16s from the 416th Flight Test Squadron, along with the pod shop and spectrum management at Edwards, are assisting in the electronic

countermeasure tests.

The fighters are armed with ALQ-167 radar jamming pods supplied by the Naval Air Warfare Center at Point Mugu, Calif. Once airborne, the fighters simulate a series of radar jamming scenarios against the Raptor.

Experts with the test force's integrated avionics group are finding that the suite is delivering as promised.

"The integrated suite is offering target location and identification data that expands the lethality and survivability of the aircraft to a multiple of what the Air Force enjoys now," said F-22 test pilot, Maj. Colin Miller, who has flown several of the radar jamming flight tests.

Suite benefits

"The suite will allow F-22 operational pilots to focus more on tactics and less on sensor management and interpretation."

According to Maj. Miller, the suite complements the stealth capability of the Raptor, which is designed to reduce the aircraft's vulnerability to radar and infrared threats.

"The stealthiness of the Raptor works to keep enemy forces in the dark, while its avionics suite works to provide Raptor pilots with the ultimate in situational awareness," Maj. Miller said.

Capt. Fred Harmon, the F-22's lead integrated avionics flight test engineer, added that the suite is designed to decrease the workload of the F-22 pilot.

Less time, better focus

"By spending less time correlating all of the data from displays, pilots can concentrate on the mission at hand," Capt. Harmon said.

"We don't want pilots to have to spend a lot of time figuring out whose good and who's bad up there. We want them to have the big picture, so they can make tactical decisions."

The majority of the F-22 electronic countermeasures testing is being conducted on the F-22 flying test bed at Boeing's Seattle facility. The test work at Edwards is designed to spot-check the test work that was conducted in Seattle, said Capt. Harmon.

He expects to continue testing the F-22 against the radar-jamming pods over the next six months.

The test force's goal is to evaluate the suite thoroughly before the Raptor transitions to operational testing, which is slated to begin in April 2003.

— Ms. Leigh Anne Bierstine, AFFTC Public Affairs

So, why do you serve?

— By Tech. Sgt. Carl Norman
AFMC Public Affairs

As I was flipping through my television channels during the Memorial Day weekend, I found several news reports and commentaries honoring those who have fallen in battle before us. Those reports told about ordinary people fighting in extraordinary circumstances for reasons they may not have understood or agreed with. They did it all because they had something inside bigger than self — patriotism and a desire to serve their country.

After wiping my eyes when the reports finished, I thought about all the patriotism being shown today in the wake of Sept. 11 — flags are flying everywhere and Americans are showing pride and confidence in their armed forces. Then I thought about what has kept me part of the Air Force team for nearly 18 years.

Loving what you do

I could say it's because I love my job; the military pays pretty decent; I've got plenty of travel opportunities and medical coverage for my family; and educational opportunities are great. All of that is true, but I could get those things at a number of other places. So, why the military?

I guess it's because of the warm feeling I get inside when kids salute me and total strangers come up and thank me for what I'm doing when I'm in uniform. It's also for those veterans who have come home from America's past wars and conflicts scarred physically and mentally, and the families of our fallen comrades we remembered Memorial Day. My service is to let them know their sacrifices to preserve freedom and democracy didn't go in vain.

Making sacrifices

When I was growing up, my older brother had a couple friends who had just returned from Vietnam. One had his right leg blown off and wore a wooden leg with a combat boot on the end. He had a good time with that; in the winter he would turn that boot backwards as he walked through the snow so one print would be forward and the next facing backwards.

My brother's other friend didn't fare so well. He made it home alright physically,

but he's like thousands of others who have nightmares about their experiences. He always hit the deck when he heard sounds like cars backfiring. I'd hate to let them know I was only in the military for the pay or benefits.

Learning lessons

I also serve because of things I learned while at the NCO Academy recently. Some of my fellow NCOs did a group paper on our experiences during Operation Desert Storm. Tech Sgt. Jack Ross from Shaw Air Force Base, N.C., shared his experiences at a missing in action museum tour in Kuwait.

He learned of the horrors Iraqi troops put the Kuwaiti people through like tying them to chairs then kicking them down flights of stairs over and over again. What he said his tour guide told him after the tour really brings things home for me. He said, "If the United States ever pulls their forces from the Middle East, I want to be on the first plane out of Kuwait because Iraq will invade us before the jets land in America." Knowing I'm helping calm fears like this man has is a big reason I serve.



Tech. Sgt. Carl Norman, AFMC news service editor, coordinates a story over the phone. A recent NCO Academy graduate, Sgt. Norman recently took time to reflect on the reasons he's been a part of the Air Force team for nearly 18 years. (Photo by Ms. Libby VanHook, AFMC Public Affairs)

Fighting terrorism

But the biggest reason I serve comes in the form of my wife and three children. I deploy to foreign countries, work long hours, put up with people I sometimes don't like at places I don't enjoy, all so they don't have to come home from school worried or afraid like they did Sept. 11.

Our NCO Academy class theme was "terrorism no more," and that's my wish, not only for my children, but people all around the world. Military life is not glamorous sometimes and it can offer less than happy times I'll admit. But it's all in what you want to make it.

If you're coming to the military for benefits, a steady paycheck, education or whatever, that's what you're going to get and not much more. If you're coming to the military to be part of securing the domestic prosperity and way of life our constitution guarantees and America's fighting forces are pledged to defend, you'll find rewards no amount of money can touch.

So now it's your turn. Why is it, exactly, that you serve?

Moulage lends realism to exercise

There's more to being prepared for emergencies than writing a plan and conducting classroom training. Getting ready for the real world requires hands-on experience.

That's what airmen at Edwards Air Force Base, Calif., recently got during the major accident response portion of base wide exercise — Operation Early Purpose.

Creating realism

According to base officials, realism is critical to a successful exercise. Moulage — creating realistic-looking injuries using theatrical paint and imitation blood — helps heighten that sense of realism.

"Realism is the key to successful training," said Tech. Sgt. Debra Mulanax, moulage team member.

"We use moulage to simulate injuries because it adds that extra bit of realism and enhances the training experience. Whether we're training medical response teams or educating airmen on self-aid and buddy care, there's a big difference between walking up to a person and seeing a bloody, real-looking injury and reading an exercise input card. What is realistically experienced is learned and retained."

A matter of time

Creating moulage is different than the special effects seen in the movies or on television, Sgt. Mulanax said. Those effects don't have to be perfect because they're only seen for a few moments. Moulage effects must not only be realistic, they also must last from the time they're applied until the last doctor, technician, nurse or emergency medical technician handles them — often several hours.

The scenario for the major accident response exercise involved a group of Civil Air Patrol cadets taken hostage by terrorists while visiting the base museum. According to the script, the terrorists' plans went awry when the tour bus driver took a wrong turn and ultimately crashed the bus into a tree near the old base commander's residence, injuring many of the cadets and killing one terrorist.

With his cohort dead and the bus out of commission, the

remaining terrorist grabbed two hostages and took refuge inside the old house. Those participating in the exercise were graded on their response to both the mass casualties and the hostage situation.

Twenty Civil Air Patrol cadets from Rosamond, Tehachapi and Desert High School volunteered to be tour group members. In addition to getting out of school for the day, the students got the chance to do a little Hollywood playacting complete with gory makeup. Members of the 95th Aerospace Medicine Squadron used moulage techniques to simulate injuries from cuts and bruises to bullet wounds.

It was cool

"The wounds are really cool. They look like the real thing," said volunteer victim Mr. Mykel Sargent after receiving his arm lacerations. "You get to walk around and act hurt without having all the pain."

Sgt. Mulanax said that before moulage, field providers and emergency room doctors missed as many as 90 percent of simulated casualties in triage exercises because they couldn't identify the injuries, and their patients wouldn't act out their part.

Acting wasn't a problem for the Civil Air Patrol volunteers. After all the cadets received their "injuries," Sgt. Mulanax helped them prepare for their acting roles by explaining both the physical and psychological aspects of being taken hostage and injured. The cadets played their roles to the hilt.

They outta go into acting

"The kids did great," Sgt. Mulanax said. "If the victims don't act it up, all the goop we put on them won't have the same effect."

The Air Force Flight Test Center inspector general, Col. Thomas Dougherty, agreed. "I can't tell you how much your participation means to us," he told the cadets after the exercise ended. "These exercises are important in helping us maintain our readiness and in ensuring we're ready to respond to a real-world emergency. Your participation added the sense of realism necessary to get the full benefit of the exercise."

— Master Sgt. Stefanie Doner, AFFTC Public Affairs



A volunteer "victim" is drenched in fake blood. Ms. Ann Walker acts out her role as one of the terrorist victims who escaped for the security forces members monitoring the area during Operation Early Purpose, a major accident response exercise. (Photo by Ms. Kristie Hogbin, AFFTC)

Planes get Hollywood touchup — Studio completes community service projects at Edwards

Paramount Studios volunteers recently paid a visit to Edwards Air Force Base, Calif., donating more than seven hours of their time improving quality of life at the base in a show of appreciation for the U.S. military.

Approximately 90 volunteers from the studio and more than 30 Edwards volunteers completed six projects throughout the base. As part of the project, all supplies, plants, tools, equipment, time, preparation and travel were donated by Viacomcommunity LA, a branch of Paramount's community service involvement.

Basewide improvements

The six projects included painting locally-designed nose art on nine aircraft — a Global Hawk, a C-17, a KC-135, two F-16s and four F-15s; completing a mural on the Blue Eagles Honor Guard training room wall; additional landscaping at the FamCamp, including new irrigation and the planting of nearly 175 shrubs and trees to provide more greenery and shade; paint-ball field improvements to obstacles and bunkers; repairs and regrading of the 95th Security Forces Squadron canine training field to improve the working dog obstacle course; and washing 12 static display aircraft at the Air Force Flight Test Center Museum.

Combining motivation and quality

"The day went great," said Col. Harry Talbot, Air Force Flight Test Center mobilization assistant to the commander. "It was a combination of motivated military and civilian volunteers who were committed to improving the quality of life for service members and their families — the defenders of America."

Edwards is one of approximately 30 volunteer efforts that Paramount Studios does, and for the studio volunteers, the work had special meaning as well, said Ms. Joan Witte, Paramount Pictures executive director of public affairs and Viacomcommunity



Ms. Lauren Whitehead, Viacom consumer products, paints nose art-work onto an F-16 aircraft designed by Ms. Lisa Bartelf, Paramount domestic television assistant. (Courtesy photo)

LA chair. The hope is that this will be one of many visits to Edwards, she said.

"The project team members worked really hard to make this a success in order to continue attracting volunteers for future projects," said Ms. Witte. "We succeeded beyond our best expectations. Many team members said it was one of the best days of their lives."

The Paramount group included project team captains and workers from all walks of the movie industry from the facilities department, public affairs, the four major divisions — motion picture, television, studio and support groups, actors from *Liar Liar*, *JAG* and *The Young and the Restless*, animation artists, information systems and security personnel. All worked side-by-side with the Edwards volunteers, firefighters and aircraft crew chiefs on the different jobs scheduled.

Prepared for the task

The nose art was one project that required a lot of preparation and coordination ahead of time, but all enjoyed the results and felt a great sense of accomplishment in the deal, said Lt. Col. Randy Witter, 412th Operations Group deputy commander for maintenance at Edwards.

"Everyone enjoyed themselves," said Ms. Witter. "The studio volunteers were taken aback by being able to work with the crew chiefs on the designs, see the aircraft first hand and paint on the planes themselves. We really appreciated them lending their time and talents — it was evident that we in the military weren't the only ones affected by the events of Sept. 11."

— Master Sgt. Anne Ward, Air Force Flight Test Center Public Affairs

2003 marks 100 years of flight: Celebrating humble beginnings and the world's greatest Air Force

"Other than that day in 1903 on a hill in North Carolina where there just happened to be a good breeze, this is where it all happened," said Chief Master Sgt. Dana Steinhauser of the United States Air Force Band at Bolling Air Force Base, D.C., talking about Dayton during an Air Force Materiel Command change of command ceremony there in April 2000.

Although the Wright brother's actual first flight happened at Kitty Hawk, N.C., the research, development and testing that made that possible happened in Dayton. Some may dispute the implied truth in Steinhauser's words. Nevertheless, the Dayton area and Air Force Materiel Command bases around the country have played a critical role in transforming powered flight from the 121 feet traveled during that 12 seconds to having aircraft frames longer than that original flight and fighters that can be hundreds of miles away in the same few seconds the Wrights transcended gravity.

Paying tribute

As this powered flight and its offspring — the United States Air Force — have matured through time, aerospace warriors are paying homage by celebrating that point in time in a variety of ways where air travel lost its mystery and became an avenue for military power.

In 2002 alone, the B-52 Stratofortress celebrates 50 golden years of service and Air Force Materiel Command itself celebrates a decade of supporting America's warfighter by bringing them tomorrow's technology today.

Powered flight marks its 100th anniversary in 2003. AFMC units are part of the foundation of powered flight, dreaming of what no one has ever done and inventing ways to improve what the Wright brothers started, in terms of man and machine.

Keeping the dream alive

From ideas dreamed up in Air Force research laboratories; those ideas being tested at the command's test and evaluation centers; and finally having experts at the Air Force Flight Test Center push those ideas to the limits at Edwards Air Force Base, Calif., AFMC is key to keeping the Wright brothers' dream alive. Maintenance experts at the command's depots at Hill AFB, Utah; Tinker AFB, Okla.; and Robins AFB, Ga., keep the fleet flying so America can remain the foremost military power on the planet.

This year will also salute the progress made at the now-closed Kelly AFB, Texas, and McClellan AFB, Calif., along with the Aircraft Maintenance and Regeneration Center at Davis-Monthan AFB, Ariz., who resurrects our history by bringing aircraft back to life, and the Air Force Security Assistance Center who expands our heritage to the rest of the world.

The country is gearing up to salute the Wright brothers and all those who followed in their footsteps — AFMC is at the lead, making science fiction and dreams reality as the Wright brothers did in 1903.

People are planning events from Dayton to Kitty-Hawk and all around the United States. Wright-Patterson AFB, Ohio, will salute the 100 years of powered flight with numerous events at

the U.S. Air Force Museum, telling the story through exhibits, art and music. AIRPOWER 2003 in May will showcase the base and its rich history of powered flight through static displays.

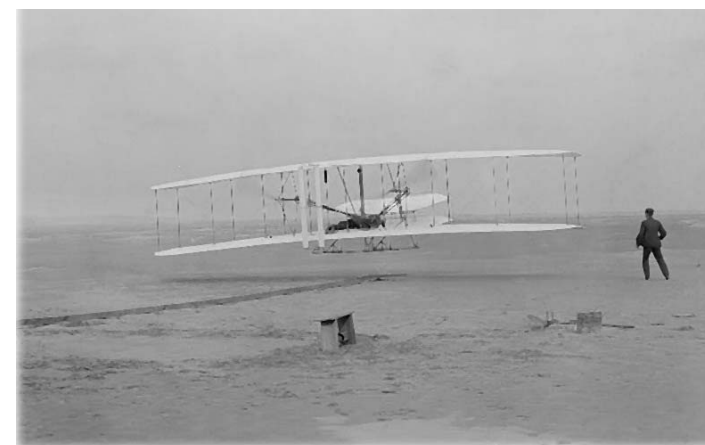
And some 99 years later, Air Force marathon runners will be running on the day the Wright brothers circled the Huffman Prairie for the first time. They'll run 1,143.27 times farther than that original first flight.

Other AFMC bases will be recognizing their contributions to powered flight as well. Edwards and Eglin AFB, Fla., will host air shows. Arnold Air Force Base, Tenn., will have Air Show June 20-23, 2003.

Air Force bands will be playing patriotic songs with special music created specifically for 2003 — you'll be able to see AFMC's Band of Flight at various museum events, the Shuster Center in downtown Dayton will host a special collaboration, and special events throughout Ohio as that state celebrates its Bicentennial, as well as its link to the two brothers.

Check out the AFMC Centennial of Flight web site at <http://www.afmc-mil.wpafb.af.mil/HQ-AFMC/PA/centennial>, and see what wonders we have made in 100 years of powered flight.

— Lt. Col. Vicki Stein, AFMC Public Affairs



Above: The first flight photograph from Kitty Hawk, North Carolina — December 17, 1903. Below: Wilbur and Orville Wright with their second powered machine on Huffman Prairie, Dayton, Ohio, during May — 1904. (Photos Courtesy Library of Congress.)

Tinker volunteers leave couple 'eternally grateful'

Mr. Wayne Martin and his wife Elizabeth said they are "eternally grateful" to members of the Tinker Management Association at Tinker Air Force Base, Okla., for improving their quality of life as part of the rebuilding together with Christmas in April project.

More than 95 association volunteers with tools in hand converged on the Martin home to perform a number of needed repairs which the elderly couple said are "an answer to their prayers."

"I can't put into words what this means to us," Ms. Martin said. "We'll never forget this as long as we live."

Tackling the 'to-do list'

Work began on the Martin home with removal of the existing roof, kitchen floor and carpet, widening interior doorways and interior painting.

The following weekend, management association volunteers got right to work again repairing a shower, painting inside and outside, installing new interior and exterior doors, installing new roofing and carpet, putting up siding, repairing a handicap ramp and performing a number of other sundry tasks.

"I've got people here that have helped me all 10 years I've been coming out here," said skills captain Mr. Randy Grubbs. "Rebuilding together with Christmas in April is a great project. Helping these needy families is what keeps us coming back."

The workers were not deterred by walls made of concrete blocks, especially knowing they were making life easier for Mr. Martin, an amputee who must rely on a wheelchair. "These repairs are going to make it so much easier for me to get in and out of the house and from room to room," Mr. Martin said. "I just can't thank the management association enough."

Army of volunteers

Since 1992, Mr. Erin Gillogly Brewer, development director, said 554 homes, 25 non-profit facilities and five public schools have been rehabilitated with the help of about 34,000 volunteers.

"Teams from Tinker have been a huge part of our success," Mr. Brewer said. "Tinker Management Association was the first group from Tinker to provide volunteers in 1995. Since then, 16 Tinker teams have renovated 57 homes for elderly homeowners."

To be eligible for the program, individuals must own their home, be 60 years of age or older and be unable to take care of the repairs themselves.

Community facilities must be non-profit organizations that provide services to Oklahoma City residents.

Other organizations participating in this year's Rebuilding Together with Christmas in April project include the 72nd Services Division, 552nd Air Control Wing and the 507th Air Refueling Wing. A Civil Engineering team comprised of DynPar and other government volunteers, as well as representatives from Tinker's Canadian component and Boeing also helped.

Brig. Gen. Loren Reno, Oklahoma City Air Logistics Center vice commander, visited one of the sites to lend his support to the many volunteers.

"As much as these volunteers are putting into this house and this couple's life and to the community,

without exception they tell me they are getting more out of it than what they're putting into it," Gen. Reno said. "That goes for military and civilian alike. That's the ultimate partnership — to work, play and donate time to the community together.

"There's no one here that doesn't want to be here," he said.

"They don't come here seeking recognition. They come because they want to give something back to the community. This is really what America is all about people getting out and helping in the community."

Donations fund repairs

Mr. Brewer said local donors fund the rebuilding project and most of the expenses are covered through donations made by businesses, churches and civic organizations.

Gifts are also received through the Air Force's annual Combined Federal Campaign, a golf tournament and individual donations.

"Our homes average around \$900 in materials for work day repairs," Mr. Brewer said. "Since all labor is volunteer, you can't put a price tag on that."

Donated materials and labor not only help keep our costs down, but also increase our value to the community.

"For every dollar donated, we return about \$5 in goods and services," he said. "On an annual basis, we provide more than \$1 million worth of service to elderly homeowners and their neighborhoods."

A gift to the community

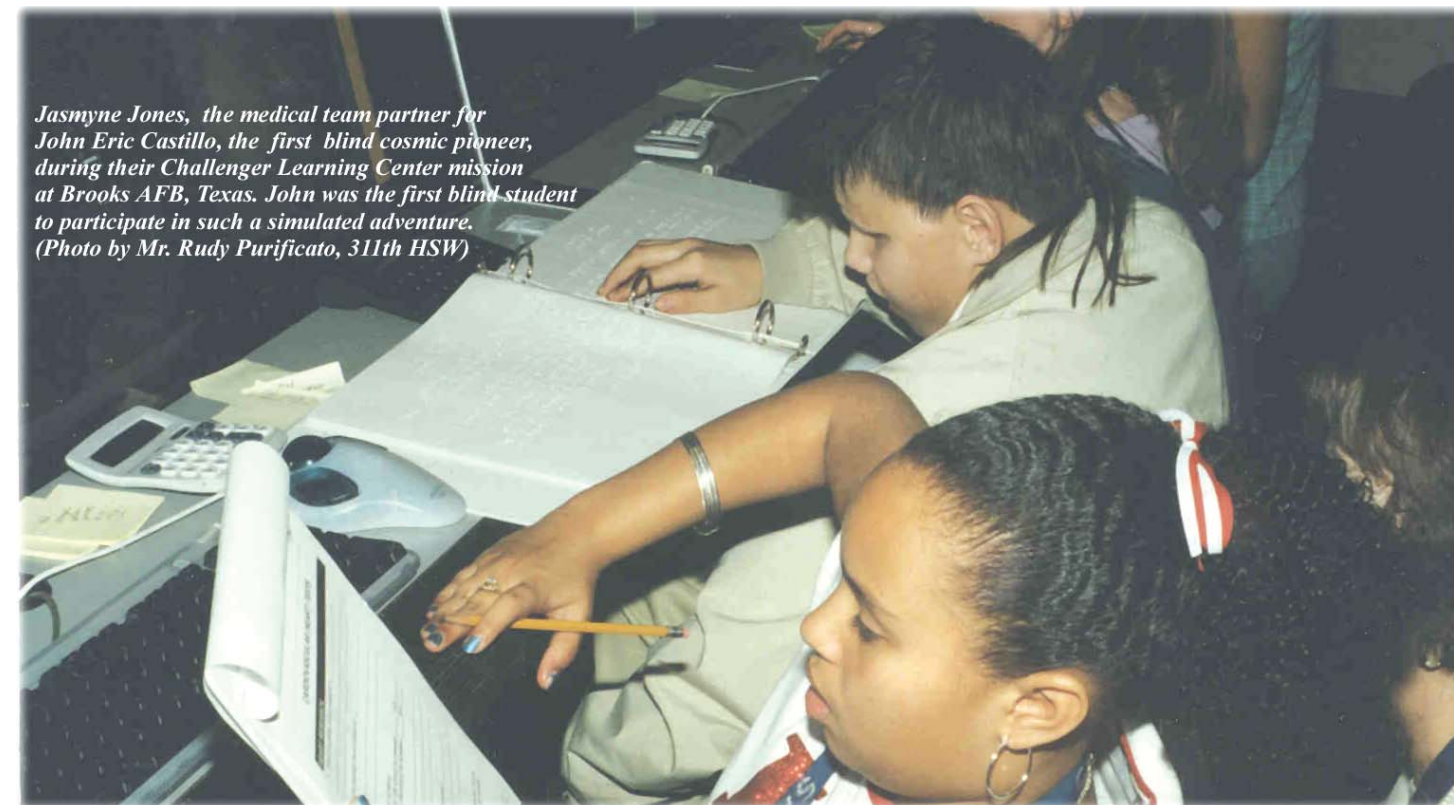
"It's nice to give back to the community, especially since they've given so much to Tinker over the years," said Ms. Sherie Donahay, team captain.

The rebuilding project was not all work and no play for the volunteers. An assortment of hamburgers, hot dogs, potato salad, chips, sodas and desserts were available to the workers throughout the day.

— Mr. Darren Heusel, OC-ALC Public Affairs



Tinker AFB, Okla., career broadeners, Capts. Dave Spencer, left, Gerald McCray and Mark Bennett, put the finishing touches on the roof of a home as part of the Tinker Management Association's "Rebuilding Together with Christmas in April" project. (Photo by Ms. Margo Wright, OC-ALC)



Jasmyne Jones, the medical team partner for John Eric Castillo, the first blind cosmic pioneer, during their Challenger Learning Center mission at Brooks AFB, Texas. John was the first blind student to participate in such a simulated adventure. (Photo by Mr. Rudy Purificato, 311th HSW)

Blind boy takes historic space trip

Blind since birth, John Eric Castillo never envisioned he'd be given an opportunity to venture into space. While this San Antonio, Texas, sixth grader's journey into the universe was only simulated, he unwittingly became America's first visually impaired cosmic pioneer.

This 12-year-old Rhodes Middle School student made history by participating in a Challenger Learning Center mission at Brooks Air Force Base, Texas.

A unique center

"We think, this is the only center in the United States that modified its program for visually impaired students," said Ms. Elizabeth Swanson, San Antonio Independent School District teacher of the visually impaired.

John Castillo's Challenger experience differed from that of Martin Luther King Middle School seventh grader Contreil Little's simulated flight here in December, as he used a

Braille book to fulfill his medical crew member assignment at both Mission Control and on the space station. Contreil, who is going blind, was able to see the same set of instructions through the aide of a special magnifying device attached to the computer monitor.

A joint endeavor

The center's accommodation of visually impaired students resulted from the support of the Brooks Aerospace Foundation, Texas Education Agency's Region 20 Education Services Center and the San Antonio Lighthouse for the Blind.

"After we opened the San Antonio Challenger Learning Center last year at Brooks, I arranged for our staff to visit the San Antonio Lighthouse for the Blind," said Mr. Herb Klein, Brooks Aerospace Foundation president. "They showed us the latest technology and equipment that they were using that could have

applications for our center."

For John's flight, Ms. Jody Harkrider, Challenger Center commander, and Ms. Swanson collaborated months in advance to modify the instructions that John read.

A special partner

Additionally, Ms. Harkrider had to coordinate with both John's school and Northside ISD Rudder Middle School's Ms. Mary Tenner whose sixth grade class participated in the Challenger mission. Jasmyne Jones, a student Ms. Tenner selected, partnered with John. The girl's kind and patient personality was a perfect fit for his highly active and talkative one.

"They really worked well together," said Ms. Swanson, who has worked with John since the boy was in kindergarten. She said it was especially important to pair him with a student who has a lot of patience and understanding, particularly since the boy had not prepared for the mission

with this class from another district.

John admitted having little trouble with his assignment. The boy read the instructions out loud to his partner who then fulfilled their medical station duties. John, an exceptionally intelligent student, said that if he had found the Challenger Center assignment difficult, he still would not have given up.

Looking to expand

Ms. Harkrider and Ms. Swanson plan to modify the medical station instructions to eliminate text that is too wordy and time consuming for visually impaired students.

"We're hoping to open the door to all visually impaired students. There's no reason for these children not to participate in Challenger Center missions," Ms. Harkrider said.

— Mr. Rudy Purificato, 311 HSW

NCO plays *Cat in the Hat* 'purr...fectly'

By the end of a long day's journey into the clamorous world of make-believe as The Cat in The Hat, she could no longer differentiate between Dr. Seuss and Dr Pepper.

Nevertheless, Staff Sgt. Wendy Garcia's seemingly disorienting mental and physical fatigue was inconsequential compared to the magnitude of having encouraged children to read through her portrayal of a beloved literary feline.

Special rewards

"Just seeing the excitement in their faces was rewarding," said Sgt. Garcia, referring to thousands of students she visited in March as part of a nationwide "Read Across America" program promoted by the National Education Association. The annual event also celebrated Mr. Theodore Geisel's, aka Dr. Seuss, birthday.

"The children confused Dr. Seuss with The Cat in The Hat," admits Sgt. Garcia when recalling numerous "happy birthday" songs sung to her during a tour of eight San Antonio Independent School District campuses sponsored by the San Antonio Teachers Council.

Sgt. Garcia, assigned to the 311th Communications Squadron's Multimedia Services Center at Brooks Air Force Base, Texas, volunteered to substitute for the original The Cat in The Hat who had been summoned for jury duty.

The role of a lifetime

Previous experience as the Easter Bunny and a Christmas elf did not fully prepare Sgt. Garcia for the tumultuous reception she experienced in the "cartoon role" of a lifetime. Several times she was mobbed by over-exuberant children who caught her off guard.

"I had to hold her back with my hand to prevent the kids from knocking her down," said Mr. J.B. Richeson, San Antonio Teachers Council president who escorted Sgt. Garcia on her tour.

"What we're trying to accomplish with this program is to

Fans of "The Cat in The Hat," at the Brooks AFB, Texas, Youth Center surprised Staff Sgt. Wendy Garcia with a birthday cake.



"The Cat in The Hat" visited several San Antonio Independent School District schools as well as Brooks AFB, Texas, during national "Read Across America" month. (Photos by Mr. Rudy Purificato, 311th HSW)

encourage every child to read. "It is our belief that this act can do more to promote literacy in our society than anything else," Mr. Richeson said.

Coupled with The Cat in The Hat visits were reading sessions supported by adult volunteers. Among various readers Sgt. Garcia encountered were members of the San Antonio Police and Fire Departments, San Antonio college undergraduates and costumed adults portraying "Mother Goose" and the "Indian in the Cupboard."

Sgt. Garcia also encouraged students to read to her when they learned that The Cat in The Hat does not talk. Sgt. Garcia learned to expect the unexpected. Her tour transportation featured a chauffeured jaguar convertible courtesy of Barrett Jaguar, giving her the added distinction of being "The Cat in a cat." She was fed "green eggs and ham" and treated to an impromptu puppet show.

A 'purr...fect' day

However, she was "speechless," of course, at two schools whose celebrations underscored the enormity of student, faculty and community involvement.

At the combined Ruiz-Barkley elementary school celebration, an estimated 1,000 children, faculty and adult volunteer readers packed the auditorium to pay tribute to The Cat in The Hat.

"They sang songs to me. They even assigned me a five-year-old escort dressed as The Cat in The Hat. She wouldn't let go of my hand," she confessed.

After having her escort "surgically removed" from her paw, Sgt. Garcia was later flabbergasted by what she experienced at Harris Middle School. She and her two-member entourage were seated front row center in a darkened but empty school theater to witness an elaborate "The Cat in The Hat" musical staged in her honor. Following the show, Sgt. Garcia was further surprised by a school library reception featuring a giant birthday cake.

She took the whole affair in stride. By the time her tour ended at the Brooks youth center, she had become quite adept at pantomime. "It was a memorable experience seeing all the children and promoting reading." She said she also characterize her day as "purr...fect."

— Mr. Rudy Purificato, 311th HSW



Tinker receives best base of the Air Force award

TINKER AIR FORCE BASE, Okla. — Amid enthusiastic applause from Tinker personnel, Tinker Installation Commander Maj. Gen. Charles Johnson II accepts the Air Force Times "Best Base of the Air Force" award during a ceremony in the base theater May 21.

Air Force Times and Geico Direct leadership, including retired Sgt. Maj. of the Army Richard Kidd, pictured, toured the installation and remarked repeatedly during the presentation on the excellence of Tinker and its relationships with the surrounding communities.

— Information provided by OC-ALC Public Affairs

WPAFB 'Angels' receive award at recent ceremony

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The 15th annual Wright-Patterson Air Force Base search for angels recently concluded with the presentation of awards at the Air Force Museum here. Sixteen individuals and six groups received Angel awards for their exceptional volunteer work at Wright-Patterson and in the community.

The Angel Awards, created in 1988 by Eunice Welch, wife of former Air Force Chief of Staff Gen. Larry Welch, recognizes volunteers for their outstanding support and dedication to the Wright-Patterson community.

Angel Awards were presented to Mr.

Myron Betts, Mr. James Bowling, Ms. Jeanette Bryant, Ms. Evelyn Cattelan, Ms. Marlene Elliott, Ms. Grace Janiszewski, A1C Shaun Lowery, Tech. Sgt. Gloria-Ann Norwood, Ms. LaWanda Oldham, SrA. Marie Paez, Ms. Danette Rall, Ms. Jeanette Robinson, Ms. Maybelle Snoddy, A1C Lisa Stanley, Mr. Richard Strode and retired Lt. Col. Ross Strode.

Group Angel Awards were presented to Air Force Sergeants Association (Kittyhawk Chapter 751), American Red Cross Youth Crew Program, Wright-Patterson Thrift Shop, Fisher/Nightingale Houses Culinary Crew Volunteers, Project Helping Hands, and the 74th Medical Center volunteer organizations.

An honorary Angel Award was presented to Ms. Kathy Hazen, wife of Col. Michael Hazen, 88th Air Base Wing commander here, for contributing countless hours and dedicated effort volunteering in numerous base organizations.

— Information provided by ASC Public Affairs

Robins wins fourth DOD pollution prevention award

ROBINS AIR FORCE BASE, Ga. — The Warner Robins Air Logistics Center's Environmental Management Directorate recently received notification that it was a four-time Defense Department Environmental award winner.

This year's award is the Secretary of Defense Award for Pollution Prevention, industrial category. It caps off a tremendous year of six awards in pollution prevention, natural resources conservation, and restoration.

The WR-ALC pollution prevention program emphasizes reduction in production cost and schedule, particularly through its integration with Lean Depot Repair, while reducing the risk of environmental violations or contamination. The intent is to keep moving toward a "zero discharge" facility.

Due to the success of the program, many WR-ALC innovations are being considered for application at other depot repair facilities and operational bases. Examples include better adhesives, low-solvent paints, new paint stripping methods and devices that spray on metallic coatings.

— Information provided by WR-ALC Public Affairs

Hanscom officer takes Air Force level fitness award

HANSCOM AIR FORCE BASE, Mass. — A lieutenant stationed here was recently named Air Force Female Athlete of the Year. Second Lt. Summer Anne Deaton, arrived here in early March. At her last base, Malmstrom AFB, Mont., she was named Air Force Space Command's Female of the Athlete of the Year.

She made it to Hanscom just in time to hear that she had won at Air Force-level.

Lt. Deaton has been playing volleyball for 14 years, and her success has taken her all over the globe for competitions.

She competes on the Armed Forces team, which includes women from all of the services and took second place in the USA National Volleyball tournament. The team also competed in Viterbo, Italy, at the Counsel for International Sports Military tournament, a world competition. They won first place.

— Information provided by ESC Public Affairs

AFRL scientist selected for national honor

ROME, N.Y. — Dr. Bruce Suter, founder and current director of the Center for Transmission and Exploitation at the Air Force Research Laboratory Rome Research site, has been named one of four government employees to receive the prestigious Arthur S. Flemming Award for Scientific Achievement.

Established in 1948 by Washington's Downtown Jaycees, the Flemming Award honors outstanding federal employees for their extraordinary contributions to the federal government. Recognized by the president, agency heads and the private sector, the winners are selected from all areas of the federal service.

Dr. Suter was selected for the award based on his professional and community service as a principal member of the technical staff at AFRL. He has made significant contributions to the professional and scientific community as a leader of national and international conference activities, and as evaluator and editor of journal and technical publications.

Dr. Suter joined the Rome staff in 1998.

— Information provided by AFRL Public Affairs